Southern Forest Pest Reporter

SB763
.S68
S68

DIVISION OF
FOREST PEST CONTROL
Southeastern Area
STATE AND
PRIVATE FORESTRY
FOREST SERVICE
U.S. DEPT OF AGRICULTURE

FIELD OFFICES
Asheville, N.C.-Alexandria, La.

Number 3 | 50-7th ST. N.E. ATLANTA, GEORGIA 30323 | October 1968

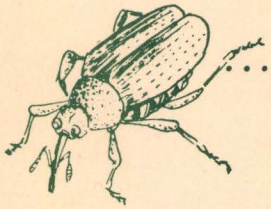
SUMMARY OF CONDITIONS

...Southern pine beetle infestations are increasing in Spartanburg County, South Carolina, in the coastal region of North Carolina, on National Forest and private land in Texas and in several areas in Louisiana. For the remainder of the Southeastern area, the population is static or decreasing. Control crews are emphasizing salvage of infested material.

...The balsam woolly aphid has been found in the balsam mountains west of Waynesville, North Carolina. The aphid is now found in all the Fraser fir stands of western North Carolina and eastern Tennessee.

...South Carolina Commission foresters found oak wilt in the city of Camden in Kershaw County. This is the first recorded instance of oak wilt in South Carolina.

...The Dutch elm disease was found for the first time this summer in both Alabama and Mississippi.



...During a survey of the Guadalupe and Davis mountains of west Texas in September, a number of insects and diseases were observed that are ordinarily thought of as western species.

LIBRARY FILE COPY

STATUS OF FOREST INSECTS

SOUTHERN PINE BEETLE, Dendroctonus frontalis, Zimm.

ALABAMA

Southern pine beetle infestations are presently at an endemic level. Recent surveys showed approximately 2.20 infested trees per M acres host type on the Bankhead National Forest, 1.10 infested trees per M acres host type on the Oakmulgee District of the Talladega National Forest, and 1.03 infested trees per M acres host type in the Talladega District of the Talladega National Forest.

Seventy-nine spots containing a total of 1,837 infested trees were treated during July and August on the National Forests in Alabama. A total of 42 infested spots and 103 M bd. ft. of sawtimber were removed in commercial sales.

GEORGIA

Southern pine beetle activity has remained low in Elbert, Madison, Franklin and Hart Counties where salvage operations were conducted last winter. A slight, but as yet not serious, increase in beetle spots has occurred in central Georgia.

Very little beetle damage was found during the last survey of the Tallulah and Chattooga Districts of the Chattahoochee National Forest.

LOUISIANA

The infestations of southern pine beetle continued on private land in Louisiana in four general areas--SE Louisiana, central Louisiana, Allen and Calcasieu Parishes. Small outbreaks were also reported in Rapides, Vernon and Beauregard Parishes.

Recent surveys indicate endemic populations in the SE Louisiana area with 2.01 infested trees per M acres host type. Ninety-eight spots have been treated June through September of this year.

A survey in June indicated 13.40 infested trees per M acres in the central Louisiana area, but the area of infestation has decreased. Reports show 120 infested spots treated June through September this year.

A survey in June showed approximately 7.3 trees infested per M acres host type in Allen Parish. A total of 455 trees were treated in this Parish during the period June to September 1968.

In Calcasieu Parish, 48.84 infested trees per M acres host type were found infested in June with infestations concentrated mostly in a small area southwest of Sulphur. Approximately 68 infested spots were treated from June to September.

MISSISSIPPI

Southern pine beetle infestations have declined to a very low level on the Homochitto National Forest and adjacent private land in Amite and Wilkinson Counties. The Homochitto projects were terminated. Only 0.38 infested trees per M acres host type were found on a June survey of the Homochitto National Forest and 0.76 infested trees per M acres host type were found on the Amite and Wilkinson County infestation. September surveys showed 0.10 infested trees per M acres host type on the Homochitto National Forest and 1.05 on the private land infestation.

NORTH CAROLINA

Epidemic populations of the southern pine beetle persist in the coastal plain and Cherokee County in the mountains. Increased beetle activity is particularly evident in the coastal plain where three counties have reported beetle kills for the first time this year. Several spots around Kinston are over 100 acres in size. Salvage operations are being intensified. Beetle populations in the Piedmont have remained static or decreased since the last report. A reduction in spot size and numbers has occurred around Lexington.

Salvage operations, aided by a better market, are presently underway in the Greenville, Kinston and Goldsboro area.

SOUTH CAROLINA

Poor pulpwood markets have hindered salvage operations in outbreak areas in Spartanburg, Abbeville, Laurens and the northern half of Greenwood and Union Counties. Beetle activity is particularly serious in Spartanburg County where spots up to several acres in size have been reported.

Beetle activity seems to be decreasing on the Sumter National Forest. Recent surveys on the Enoree District found no measurable southern pine beetle population. The beetle population on the Long Cane is presently static or slightly decreasing.

SOUTHERN PINE BEETLE (Cont'd)

TENNESSEE — Thirty-seven beetle spots were detected during a recent survey in the Cades Cove area of the Great Smoky Mountains National Park. The spots, up to 200 trees in size, are all in an inaccessible area of the Park making control impossible.

TEXAS — Epidemic populations occurred on all National Forests having southern pine beetle suppression projects with the most severe infestations occurring on the Angelina National Forest. July surveys showed a considerable increase in the number of infestations. The number of infested trees per M acres of host type were as follows: Angelina District, 184; Tenaha District, 22; and Yellowpine District, 20. A survey of the Big Thicket District in September showed no infested trees per M acres; however, 96 spots containing 1,355 infested trees, were treated on this District during July and August. A total of 4,707 trees were treated chemically and 305 M bd. ft. of sawtimber and 1,182 cords of pulpwood were removed by commercial sales for control of the southern pine beetle on all Districts.

Southern pine beetle became epidemic on private land in Texas again this summer with 149,226 infested trees, treated through September 1968. The number of infested trees treated during the same period in 1967 was 87,896.

VIRGINIA — The Richmond National Battlefield Park has reported increased southern pine beetle attacks.

BLACK TURPENTINE BEETLE, Dendroctonus terebrans (Oliver)

ARKANSAS — Infestations of the black turpentine beetle in the Camden hail damaged area appear to be on the increase. Black turpentine beetles are attacking live trees in the area 50 to 75 percent defoliated by the hail; whereas, previous attacks were confined to logging areas.

GEORGIA — A complex of black turpentine beetles and Ips spp. is causing slightly above normal losses in the southwest section of the coastal plain.

BLACK TURPENTINE BEETLE (Cont'd)

LOUISIANA — Field studies of two different insecticide treatment methods for control of the black turpentine beetle, Dendroctonus terebrans, were conducted over a three-year period. Treatment with BHC did not show a significant difference in reducing tree mortality when compared to unsprayed areas. Data indicate that black turpentine beetle activity is presently at an endemic level in central Louisiana. Termination of control operations is recommended.

SOUTH CAROLINA — A recent survey of the Enoree District, Sumter National Forest revealed a relatively low population of black turpentine beetles infesting trees attacked by Ips avulsus.

TEXAS — An evaluation of the status of the black turpentine beetle on the National Forests in Texas revealed a low level of infestation and an insignificant degree of mortality. Termination of chemical control operations has been recommended.

IPS ENGRAVER BEETLES, Ips spp.

ARKANSAS — Infestations by three species of Ips beetles, I. avulsus, I. grandicollis and I. calligraphus, on private land in Arkansas, are high following a severe hail storm, which occurred in the Camden area during late April. Large stands heavily damaged by hail have been destroyed by this beetle.

TENNESSEE — A very active Ips avulsus population is presently causing considerable damage on the Atomic Energy Commission's land at Oak Ridge, Tennessee.

TEXAS — Reports of unusually high populations of Ips engraver beetles, Ips spp., were received from east Texas, where ips-killed trees have been proportionately high, when compared with past years.

Ips spp. were found attacking pinyon pine, Pinus edulis, in isolated areas of the Davis Mountains in west Texas.

NANTUCKET PINE TIP MOTH, Rhyacionia frustrana (Comst.)

TEXAS — The nantucket pine tip moth, Rhyacionia frustrana (Comst.) continues to be a serious problem in certain areas throughout the summer months. It is interesting to point out that severe attacks from this pest are not confined to seed orchards and nurseries; e.g., in the vicinity of Clarksville, in northeast Texas, the International Paper Company has over 2,000 acres of 90 percent plus infested tips of shortleaf pine, Pinus echinata Mill. Growth has been markedly reduced for the past 6 years in this naturally-seeded stand.

FALL WEBWORM, Hyphantria cunea

MISSISSIPPI TEXAS — Defoliation by the fall webworm, Hyphantria cunea (Drury), has been moderate during the summer months in most areas throughout the Alexandria Office territory. Early chemical control measures implemented on the Natchez Trace Parkway in Mississippi have kept this scenic area virtually free of defoliated trees and unsightly webs. Heavy defoliation of persimmon with webs engulfing entire trees have been reported from the Davy Crockett National Forest in Texas.

NORTH CAROLINA — Defoliation by the fall webworm has been reported in the Piedmont and mountains from Virginia to South Carolina.

PINE SAWFLIES, Neodiprion spp.

KENTUCKY — Mortality is beginning to occur in scattered areas of eastern Kentucky suffering reported defoliation by the Virginia pine sawfly, Neodiprion pratti pratti (Dyar.) Most seriously affected are the over-mature shortleaf pines on ridges. Below normal rainfall for the past several years has aggravated the problem.

NORTH CAROLINA — A thus far unidentified sawfly is causing severe damage to mature loblolly pine on approximately 1,000 acres on Weyerhaeuser Incorporated lands in Pasquotauk County. A cooperative survey between the North Carolina Division of Forestry and Forest Pest Control to determine extent of damage revealed heavy defoliation which has already caused some mortality. More can be expected if the present intensity of outbreak continues. Evaluation and recommendations on the sawfly outbreak are pending the rearing and ultimate identification of the immature insects collected.

MISCELLANEOUS INSECTS

ELM LEAF BEETLE, Monocesta coryli

ALABAMA — The larger elm leaf beetle was reported defoliating eight elm trees near Centreville, Alabama on private land.

COTTONWOOD INSECTS

LOUISIANA — The cottonwood twig borer, Gypsonoma haimbachiana (Kearfott), proved itself to be the most destructive of the insects that damage young trees of eastern cottonwood. Populus deltoides Bartr. This insect, in conjunction with the cottonwood leaf beetle, Chrysomela scripta F., has reduced the growth rate of young cottonwood plantations in central Louisiana.

NORTH CAROLINA — Balsam Woolly Aphid - Adelges piceae (Ratz.) A new infestation of the balsam woolly aphid has been located on Jones Knob west of Waynesville, North Carolina. So far, only two infested trees have been found. Pest Control scientists will check this area carefully in October.

TEXAS — A budworm, probably Choristoneura sp., was causing light defoliation of young Douglas fir in the Guadalupe Mountains in west Texas.

DOUGLAS FIR BEETLE, Dendroctonus pseudotsugae Hopk.

TEXAS — Approximately 30 Douglas fir trees were killed by the Douglas fir beetle in South McKittrick Canyon area of the Guadalupe Mountains of west Texas. This is believed to be the first report of the occurrence of this insect in Texas.

WESTERN PINE BEETLE, Dendroctonus brevicomis, Leconte

TEXAS — A September survey of west Texas showed scattered single-tree infestations of western pine beetle in ponderosa pine in the vicinity of Black Mountain in the Davis Mountains.

STATUS OF FOREST DISEASES

DUTCH ELM DISEASE, Ceratocystis ulmi (Buism.) C Moreau

ALABAMA — Dutch elm disease was detected near Scottsboro, Alabama in September. The pathogen was isolated from one winged elm, Ulmus alata Michx. This is the first reported occurrence of Dutch elm disease in Alabama.

DUTCH ELM DISEASE (Cont'd)

MISSISSIPPI — Dutch elm disease was detected along the Natchez Trace Parkway during June 1968. The causal agent, C. ulmi was isolated from 15 out of 17 elm trees sampled between Tupelo and Mathiston, Mississippi, a distance of 60 miles. Winged elm, Ulmus alata Michx., is the primary host affected in this area. The smaller European elm bark beetle, Scolytus multistriatus (Marsh.), was collected from several of the diseased trees and is probably the primary vector of C. ulmi in Mississippi. This is the first reported occurrence of Dutch elm disease in Mississippi.

OAK WILT

VIRGINIA NORTH AND SOUTH CAROLINA — Results of surveys conducted by states of North Carolina and Virginia this summer indicate that incidence of oak wilt is lower than in 1967. In Western North Carolina only about two-thirds as many infected trees have been detected this summer as in the summer of 1967.

Oak wilt was found for the first time in South Carolina this summer. Disease was found by South Carolina State Forestry personnel in the city of Camden in Kershaw County.

WHITE PINE BLISTER RUST

VIRGINIA — A white pine blister rust evaluation was completed during the winter and spring of 1967-68 on the George Washington National Forest, Virginia. The objectives of the evaluation were to determine the incidence of blister rust, occurrence of ribes and white pine stand conditions on the Forest. Results showed that both blister rust infection on pine and ribes occurrence were very low at present. Less than 2 percent pine infection was found in two of fifteen randomly sampled control grids. Consequently, the postponement of all ribes eradication work on the Forest has been recommended. A similar survey is now in progress on the Jefferson National Forest.

LOBLOLLY PINE DIE-OFF

ALABAMA — Data from the third annual evaluation of loblolly pine die-off show that, based on the foliar symptom classification of 338 permanent plot trees, 41 percent of the trees declined, 25 percent expressed improvement, and 34 percent were unchanged. Nine trees have died since the evaluation began.

ROOT ROT IN YELLOW-POPLAR SEEDLINGS

NORTH CAROLINA — Extensive root rot is presently causing severe losses in yellow-poplar seed beds at the Ralph Edwards State Nursery in Morgantown, North Carolina. Disease symptoms and infection pattern are typical of the seedling root rot organism Cylindrocladium scoparium. Laboratory diagnosis of infected seedlings is in progress. Observations revealed that approximately one-half of 250,000 yellow-poplar seedlings seeded in May 1968 are presently dead or dying.

MISCELLANEOUS DISEASES

ARKANSAS — In a previous timber sale on the Ouachita National Forest in Arkansas, excessive loss was caused by the fungus Polyporus tomentosus. An evaluation conducted on the forest in September did not show any P. tomentus present but showed a small amount of P. schweinitizii.

NEEDLECAST OF FRASER FIR

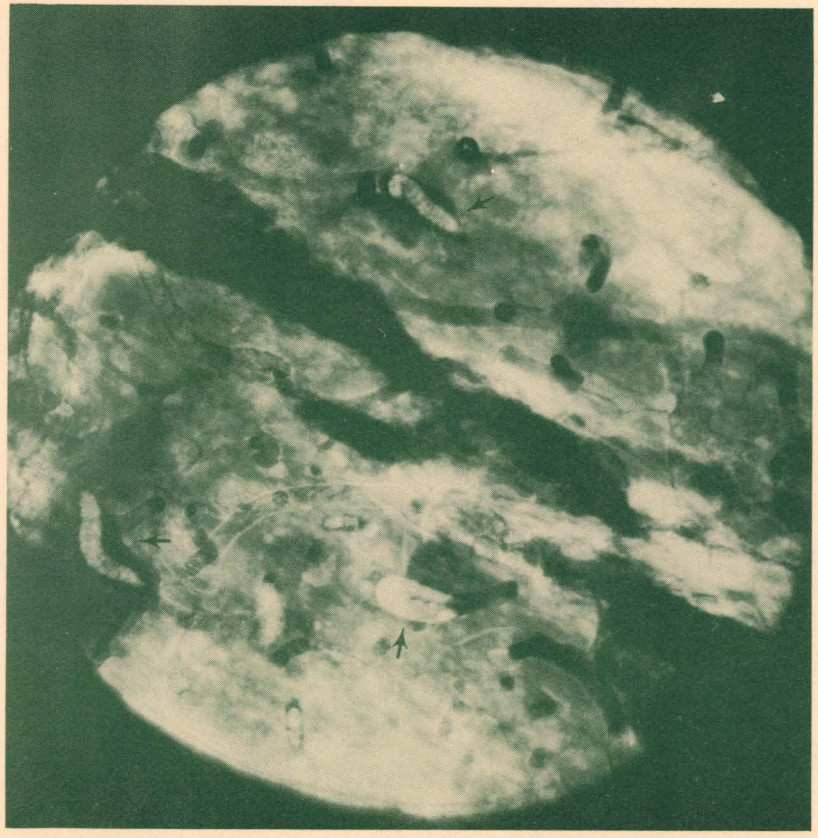
NORTH CAROLINA — Results of an evaluation recently conducted in Fraser fir Christmas tree sale units on Roan Mountain, North Carolina indicate that incidence of needlecast is much lower (approximately one-third) than the amount observed in September 1967. Present damage is insignificant as a degrading factor in this year's Christmas tree sales.

WESTERN GALL RUST, Peridermium harknessii Moore

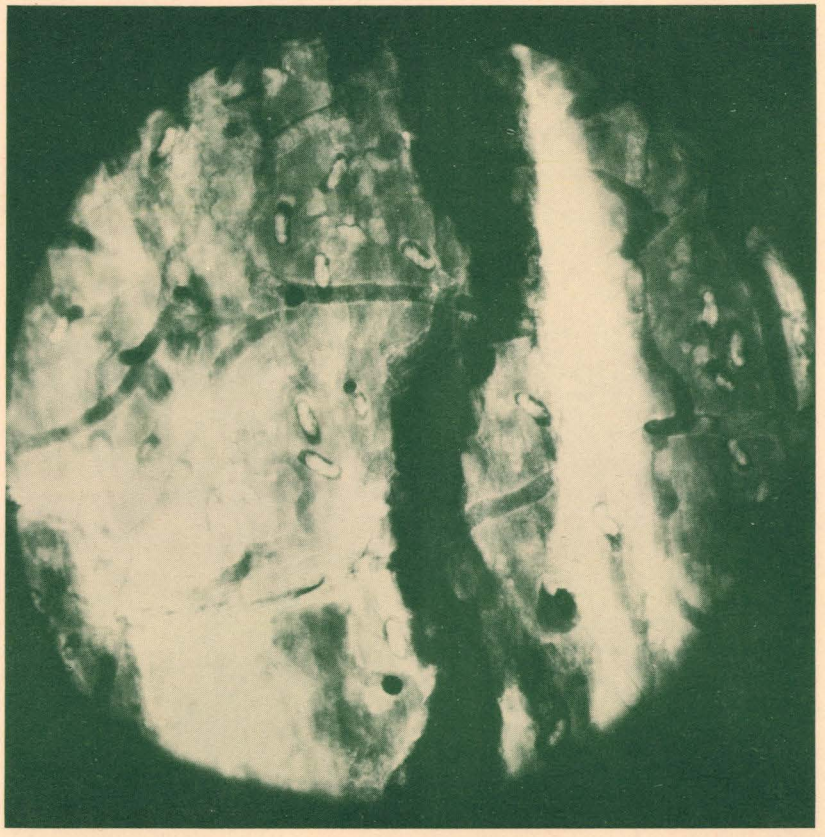
TEXAS — Garland Mason, Forest Pest Control Section, Texas Forest Service, reports observing western gall rust on ponderosa pine, Pinus ponderosa Laws., in the Davis Mountains, Jeff Davis County. This is the first known report of western gall rust in Texas.

SOUTHWESTERN DWARF MISTLETOE, Arceuthobium vaginatum (Willd.) Presl.

TEXAS — Extensive infection by A. vaginatum was observed on ponderosa pine, Pinus ponderosa Laws., throughout the Guadalupe Mountains in Culberson County.



A



B

Radiographs are an excellent tool for estimating populations of the southern pine beetle and the effect of its associates. Photo A clearly shows effect of predation by clerid larvae (see arrows). Only 3 southern pine beetles survived. Photo B shows a large number of southern pine beetles, characteristic of an increasing infestation.

More detailed information can be obtained by writing to The Forest Pest Control Division Field Offices listed below or to the Atlanta Office:

FIELD OFFICES	FOR STATES OF:
Asheville Office Amel E. Landgraf Zone Supervisor U. S. Forest Service Div. of Forest Pest Control Post Office Box 5895 Asheville, North Carolina 28803 Phone: (704) 254-0961 Ext. 625	Florida Georgia Kentucky North Carolina South Carolina Tennessee Virginia
Alexandria Office William M. Ciesla Zone Supervisor U. S. Forest Service Div. of Forest Pest Control 2500 Shreveport Highway Pineville, Louisiana 71306 Phone: (318) 445-6511 Ext. 311	Alabama Arkansas Louisiana Mississippi Oklahoma Texas

AREA OFFICE

Russell K. Smith
Assistant Area Director
U. S. Forest Service
Div. of Forest Pest Control
50 7th Street, N. E.
Atlanta, Georgia 30323

Phone: (404) 526-5189